

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A processor implemented method of describing and using a document link for linking a portion of a first document of a link source and a portion of a second document of a linking destination, the method comprising:

describing an abstract link in the first document ~~of the link source~~, the abstract link ~~describing~~ including a link establishing condition for establishing a plurality of document link links between each of a plurality of portions having same information in the first document ~~of the link source~~ and the portion of the second document ~~of the linking destination on a basis of retrieval of document information of the first document of the link source and the second document of the linking destination~~;

~~retrieving and determining the second document satisfying the link establishing condition~~; and

establishing [[a]] the plurality of document link links between the plurality of portions of the first and the second documents based upon the retrieving and determining document and the portion of the second document when the portion of the second document is to be referred to by the plurality of portions of the first document.

Claim 2 (Original): A method of Claim 1, wherein the abstract link describes a nature of document elements of the first document of the link source and the second document of the linking destination according to a Horn clause predicate expression.

Claim 3 (Original): A method of Claim 1, wherein the abstract link derives document elements of the first document of the link source and the second document of the linking source documents satisfying the link establishing condition on a basis of a backtrack

evaluation and a calculation to bind a variable based upon the document information retrieval.

Claim 4 (Original): A method of Claim 1, wherein the abstract link is described using an atom predicate.

Claim 5 (Currently Amended): A document link generating apparatus for linking a portion of a first document of a link source and a portion of a second document of a linking destination, comprising:

~~an~~ a processor implemented abstract link extracting device configured to extract, from the first document ~~of the link source~~, an abstract link describing a link establishing condition for establishing a plurality of document link links between each of a plurality of portions having same information in the first document ~~of the link source~~ and the portion of the second document ~~of the linking destination on a basis of retrieval of document information of the first document of the link source and the second document of the linking destination~~; and

a processor implemented document link generating device configured to generate the plurality of the document links link based upon the extracted abstract link between the plurality of portions of the first document and the portion of the second document when the portion of the second document is to be referred to by the plurality of portions of the first document.

Claim 6 (Original): An apparatus of Claim 5, wherein the abstract link describes a nature of document elements of the first document of the link source and the second document of the linking destination according to a Horn clause predicate expression.

Claim 7 (Original): An apparatus of Claim 5, wherein the abstract link derives document elements of the first document of the link source and the second document of the linking destination satisfying the link establishing condition on a basis of a backtrack evaluation and a calculation to bind a variable based upon the document information retrieval.

Claim 8 (Original): An apparatus of Claim 5, wherein the abstract link is described using an atom predicate.

Claim 9 (Currently Amended): A document link generating apparatus for linking a portion of a first document of a link source and a portion of a second document of a linking destination, comprising:

processor implemented means for extracting, from the first document ~~of the link source~~, an abstract link ~~describing~~ including a link establishing condition for ~~determining a~~ establishing a plurality of document link links between each of a plurality of portions having same information in the first document ~~of the link source~~ and the portion of the second document ~~of the linking destination~~; and

processor implemented means for generating the plurality of document link links ~~based upon the extracted abstract link~~ between the plurality of portions of the first document and the portion of the second document when the portion of the second document is to be referred to by the plurality of portions of the first document.

Claim 10 (Currently Amended): A computer program product, comprising:
a computer storage medium and a computer program code mechanism embedded in the computer storage medium for causing a computer to control linking a portion of a first

document of a link source and a portion of a second document of a linking destination, the computer program code mechanism comprising:

a first computer code device configured to extract, from the first document ~~of the link source~~, an abstract link describing a link establishing condition for establishing a plurality of document link links between each of a plurality of portions having same information in the first document of the link source and the portion of the second document of the linking destination on a basis of retrieval of document information of the first document of the link source and the second document of the linking destination; and

a second computer code device configured to generate the plurality of document links ~~link based upon the extracted abstract link between the plurality of portions of the first document and the portion of the second document when the portion of the second document is to be referred to by the plurality of portions of the first document.~~

Claim 11 (Original): A computer program product of Claim 10, wherein the abstract link describes a nature of documents elements of the first document of the link source and the second document of the linking destination according to a Horn clause predicate expression.

Claim 12 (Original): A computer program product of Claim 10, wherein the abstract link derives document elements of the first document of the link source and the second document of the linking destination satisfying the link establishing condition on a basis of a backtrack evaluation and a calculation to bind a variable based upon the document information retrieval.

Claim 13 (Original): A computer program product of Claim 10, wherein the abstract link is described using an atom predicate.